

Remarks

The Office Action mailed February 23, 2004 has been carefully reviewed and the following remarks have been made in consequence thereof.

Claims 1-20 are now pending in this application. Claims 1-20 are rejected. Claims 1, 7, 9, and 19 have been amended. No new matter has been added.

The rejection of Claims 1, 2, 7-12, 15, 16, and 18-20 under 35 U.S.C. § 102(e) as being anticipated by Ross et al. (U.S. Patent Publication No. 2002/0169523) is respectfully traversed.

Ross et al. describe a fuel cell-based power system (8), which is readily available and utilized at a site as a distributed resource in a utility grid system (paragraph 17). The power system is connected to a utility grid bus (10), and employs multiple fuel cell power plants (18) located at a common site, for supplying, with the grid, 3-phase power to, and through, a load contactor array (13) to loads (14), usually also at the same site (paragraph 17). The fuel cell power plants provide power to the loads on a substantially continuous basis, irrespective of occasional disconnects of the utility grid from the power plants and loads (paragraph 17). A site management system (SMS) (11) for the site includes three controllers which are responsible for coordinating integrated operation of the multiple power plants, first with respect to each other and with respect to the customer loads, and ultimately as a single power resource with respect to the utility grid (paragraph 21).

A total power demand of the loads is conveyed to a site supervisory controller (SSC) (29) where it is compared with a total kilowatt capacity signal (95) to determine whether or not there is sufficient capacity to meet an instant demand of the loads (paragraph 38). If that comparison, by subtraction or ratio or other convenient means, indicates that the instant load demand is greater than the total kilowatt capacity, a load shedding condition arises (paragraph 38). This is done in accordance with the previously determined schedule of priorities, by disconnecting (shedding) certain ones, or groups, of the loads by selective actuation (opening) of respective individual load contactors (13) by the control signals represented by a lead (70) between a load shed controller (LSC) (34) and the contactors (paragraph 38).

Claim 1 recites a method for supplying power, the method comprising “supplying power to at least one critical device; supplying power to at least one essential device; and remotely removing power to the essential device while maintaining power to the critical device, wherein said remotely removing power comprises remotely removing the power on receiving an instruction via the Ethernet to remotely remove the power.”

Ross et al. do not describe or suggest a method for supplying power as recited in Claim 1. Specifically, Ross et al. do not describe or suggest remotely removing power to the essential device while maintaining power to the critical device, where remotely removing power includes remotely removing the power on receiving an instruction via the Ethernet to remotely remove the power. Rather, Ross et al. describe disconnecting certain ones, or groups, of the loads by selective actuation of respective individual load contactors by the control signals represented by a lead between a load shed controller (LSC) and the contactors, where the LSC is included within a site management system of the site at which the loads are located. Accordingly, Ross et al. do not describe or suggest remotely removing the power on receiving an instruction via the Ethernet to remotely remove the power. For the reasons set forth above, Claim 1 is submitted to be patentable over Ross et al.

Claim 2 depends from independent Claim 1. When the recitations of Claim 2 are considered in combination with the recitations of Claim 1, Applicant submits that Claim 2 likewise is patentable over Ross et al.

Claim 7 recites an energy management system comprising “a generation module; at least one power distribution unit remote from said generation module and communicatively coupled to said generation module, wherein at least one said power distribution unit is connected to at least one essential device; a master control system remote from said generation module and said power distribution unit, said master control system communicatively coupled to said generation module and said power

distribution unit; and an energy storage system configured to store power when power is not supplied to the essential device.”

Ross et al. do not describe or suggest an energy management system as recited in Claim 7. Specifically, Ross et al. do not describe or suggest an energy storage system configured to store power when power is not supplied to the essential device. Rather, Ross et al. describe multiple fuel cell power plants located at a common site, for supplying, with the grid, 3-phase power to, and through, a load contactor array to loads. Accordingly, Ross et al. do not describe or suggest an energy storage system configured to store power when power is not supplied as recited in Claim 7. For the reasons set forth above, Claim 7 is submitted to be patentable over Ross et al.

Claims 8-12, 15, 16, and 18 depend, directly or indirectly, from independent Claim 7. When the recitations of Claims 8-12, 15, 16, and 18 are considered in combination with the recitations of Claim 7, Applicant submits that Claims 8-12, 15, 16, and 18 likewise are patentable over Ross et al.

Claim 19 recites an energy management system comprising “a generation module comprising at least two power sources; at least two power distribution units remote from said generation module and communicatively coupled to said generation module, at least one said power distribution unit connected to at least one critical device, at least one said power distribution unit connected to at least one essential device; a master control system remote from said generation module and said power distribution unit, said master control system communicatively coupled to said generation module and said power distribution unit, said master control system configured to remotely monitor said generation module and instruct said power distribution unit connected to the essential device to stop supplying power to the essential device; and an energy storage system configured to store power when power is not supplied to the essential device.”

Ross et al. do not describe or suggest an energy management system as recited in Claim 19. Specifically, Ross et al. do not describe or suggest an energy storage system configured to store power when power is not supplied to the essential device. Rather, Ross et al. describe multiple fuel cell power plants located at a common site, for supplying, with the grid, 3-phase power to, and through, a load contactor array to

loads. Accordingly, Ross et al. do not describe or suggest an energy storage system configured to store power when power is not supplied as recited in Claim 19. For the reasons set forth above, Claim 19 is submitted to be patentable over Ross et al.

Claim 20 depends from independent Claim 19. When the recitations of Claim 20 are considered in combination with the recitations of Claim 19, Applicant submits that Claim 20 likewise is patentable over Ross et al.

For at least the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claims 1, 2, 7-12, 15, 16, and 18-20 be withdrawn.

The rejection of Claims 3-6, 13, 14, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Ross et al. and further in view of Lansberry et al. (U.S. Patent No. 6,452,289) is respectfully traversed.

Ross et al. is described above. Lansberry et al. describe fuel cells that cannot respond immediately to sharp increases in demand. (column 1, lines 33, 34) Batteries, which have an immediate response time, store rather than produce energy hence are only good until the battery has drained (column 1, lines 34-36). Moreover, battery cost is directly proportional to the stored energy needed (column 1, lines 36-37). Batteries are used to provide peak power, and a fuel cell is used to provide a continuous power, as well as to keep the battery charged (column 1, lines 37-40). A grid-linked power supply topology, where a primary power producing means includes at least one fuel cell, and/or other alternative energy source, which singly or in combination with each other or with a battery or other energy storage device such as a flywheel or ultra-capacitor, generate sufficient continuous power for normal demands of residential, commercial or industrial consumers (column 3, lines 48-55).

Claims 3-6 depend, directly or indirectly, from independent Claim 1 which recites a method for supplying power, the method comprising “supplying power to at least one critical device; supplying power to at least one essential device; and remotely removing power to the essential device while maintaining power to the critical device, wherein said remotely removing power comprises remotely removing the power on receiving an instruction via the Ethernet to remotely remove the power.”

Neither Ross et al. nor Lansberry et al., considered alone or in combination, describe or suggest a method for supplying power as recited in Claim 1. Specifically, neither Ross et al. nor Lansberry et al., considered alone or in combination, describe or suggest remotely removing power to the essential device while maintaining power to the critical device, where remotely removing power includes remotely removing the power on receiving an instruction via the Ethernet to remotely remove the power. Rather, Ross et al. describe disconnecting certain ones, or groups, of the loads by selective actuation of respective individual load contactors by the control signals represented by a lead between a load shed controller (LSC) and the contactors, where the LSC is included within a site management system of the site at which the loads are located. Lansberry et al. describe generation of continuous power by at least one fuel cell, and/or other alternative energy source, singly or in combination with each other or with a battery or other energy storage device, for normal demands of residential, commercial or industrial consumers. Accordingly, neither Ross et al. nor Lansberry et al., considered alone or in combination, describe or suggest remotely removing the power on receiving an instruction via the Ethernet to remotely remove the power. For the reasons set forth above, Claim 1 is submitted to be patentable over Ross et al. in view of Lansberry et al.

When the recitations of Claims 3-6 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 3-6 likewise are patentable over Ross et al. in view of Lansberry et al.

Claims 13, 14, and 17 depend, directly or indirectly, from independent Claim 7 which recites an energy management system comprising “a generation module; at least one power distribution unit remote from said generation module and communicatively coupled to said generation module, wherein at least one said power distribution unit is connected to at least one essential device; a master control system remote from said generation module and said power distribution unit, said master control system communicatively coupled to said generation module and said power distribution unit; and an energy storage system configured to store power when power is not supplied to the essential device.”

Neither Ross et al. nor Lansberry et al., considered alone or in combination, describe or suggest an energy management system as recited in Claim 7. Specifically,

neither Ross et al. nor Lansberry et al., considered alone or in combination, describe or suggest an energy storage system configured to store power when power is not supplied to the essential device. Rather, Ross et al. describe multiple fuel cell power plants located at a common site, for supplying, with the grid, 3-phase power to, and through, a load contactor array to loads. Lansberry et al. describe a fuel cell that is used to provide the continuous power, as well as to keep the battery charged. Accordingly, neither Ross et al. nor Lansberry et al., considered alone or in combination, describe or suggest an energy storage system configured to store power when power is not supplied as recited in Claim 7. For the reasons set forth above, Claim 7 is submitted to be patentable over Ross et al. in view of Lansberry et al.

When the recitations of Claims 13, 14, and 17 are considered in combination with the recitations of Claim 7, Applicant submits that dependent Claims 13, 14, and 17 likewise are patentable over Ross et al. in view of Lansberry et al.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 3-6, 13, 14, and 17 be withdrawn.

Moreover, Applicant respectfully submits that the Section 103 rejections of Claims 3-6, 13, 14, and 17 is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Ross et al. nor Lansberry et al., considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Ross et al. with Lansberry et al. because there is no motivation to combine the references suggested in the cited art itself.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20

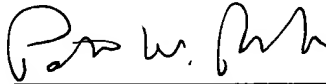
U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Ross et al. describe disconnecting certain ones, or groups, of the loads by selective actuation of respective individual load contactors by the control signals represented by a lead between a load shed controller (LSC) and the contactors, where the LSC is included within a site management system of the site at which the loads are located. Ross et al. also teach multiple fuel cell power plants located at a common site, for supplying, with the grid, 3-phase power to, and through, a load contactor array to loads. Lansberry et al. teach a fuel cell that is used to provide the continuous power, as well as to keep the battery charged. Lansberry et al. also teach generation of continuous power by at least one fuel cell, and/or other alternative energy source, singly or in combination with each other or with a battery or other energy storage device, for normal demands of residential, commercial or industrial consumers. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicant requests that the Section 103 rejections of Claims 3-6, 13, 14, and 17 be withdrawn.

For at least the reasons set forth above, Applicant respectfully requests that the rejections of Claims 3-6, 13, 14, and 17 under 35 U.S.C. 103(a) be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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